

## SEQUENCE LISTING

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MILLER, JEFFREY  
PABO, CARL O.

<120> METHODS AND COMPOSITIONS FOR INTERACTION TRAP ASSAYS

<130> MTV-030.01 (20021-3001)

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<141> 2001-05-16

<150> 60/204,509  
<151> 2000-05-16

<160> 91

<170> PatentIn Ver. 2.1

<210> 1  
<211> 25  
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<220>  
<223> Description of Artificial Sequence: Illustrative  
conserved peptide sequence

<220>  
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variable amino acids

<220>  
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<222> (20)..(24)  
<223> Variable amino acid; this Xaa range may encompass 3-5  
variable amino acids

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Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
1 5 10 15

Xaa Xaa His Xaa Xaa Xaa Xaa His  
20 25

<210> 2  
<211> 38  
<212> DNA  
<213> Unknown Organism

:

&lt;220&gt;

&lt;223&gt; Description of Unknown Organism: Lac promoter

&lt;400&gt; 2

ctttacactt tatgcttccg gctcgtatgt tgtgtcga

38

&lt;210&gt; 3

&lt;211&gt; 39

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Hybrid promoter

&lt;400&gt; 3

ctttacaatt tatcccttgg tcggctagat ttactcgag

39

&lt;210&gt; 4

&lt;211&gt; 4

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Illustrative zinc finger peptide

&lt;400&gt; 4

Cys Cys His His

1

&lt;210&gt; 5

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Description of Artificial Sequence: Linker

&lt;400&gt; 5

Ala Ala Ala Pro Arg Val Arg Thr Gly

1

5

&lt;210&gt; 6

&lt;211&gt; 16

&lt;212&gt; DNA

&lt;213&gt; Escherichia coli

&lt;400&gt; 6

tcgacaagcg tgggcg

16

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<223> Description of Artificial Sequence: Synthetic
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<400> 7
caagggttca gggcg 16

<210> 8
<211> 16
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      oligonucleotide

<400> 8
ggctataaaa gggcg 16

<210> 9
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
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<400> 9
tgggacatgt tggcg 16

<210> 10
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Zinc finger
      recognition sequence

<400> 10
Asn Ser Gly Ser Trp Lys
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<210> 11
<211> 6
<212> PRT
<213> Artificial Sequence
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<220>   
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 11  
Asn Ser Gly Ser His Lys  
1 5

<210> 12  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 12  
Asn His Gly Ser Trp Lys  
1 5

<210> 13  
<211> 6  
<212> PRT  
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<220>  
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recognition sequence

<400> 13  
Thr Arg Thr Asn Lys Ser  
1 5

<210> 14  
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<220>  
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recognition sequence

<220>  
<221> MOD\_RES  
<222> (2)  
<223> Positively charged amino acid

<220>  
<221> MOD\_RES  
<222> (5)  
<223> Positively charged amino acid

<400> 14  
 Arg Xaa Trp Leu Xaa Leu  
 1 5

<210> 15  
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<220>  
 <223> Description of Artificial Sequence: Consensus  
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 <223> No clear preference

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<400> 15  
 cnggacacgt n 11

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 <212> DNA  
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<220>  
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 <222> (6)..(10)  
 <223> A, T, C or G

<400> 16  
 cgggannnnn g 11

<210> 17  
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 <212> DNA  
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<220>  
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<400> 17  
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z

<210> 18  
<211> 11  
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<210> 19  
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<210> 20  
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<220>  
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<400> 20  
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<210> 21  
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<212> DNA  
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<210> 22  
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<220> **2**  
<223> Description of Artificial Sequence: Illustrative  
nucleotide sequence

<400> 22  
cgggacacgg g 11

<210> 23  
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<220>  
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recognition sequence

<400> 23  
Gln Arg Gly Asn Leu Val  
1 5

<210> 24  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 24  
Gln Lys Thr Asn Met Val  
1 5

<210> 25  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 25  
Gln Lys Tyr Asn Ile Leu  
1 5

<210> 26  
<211> 6  
<212> PRT  
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recognition sequence

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<400> 26  
Gln Arg Tyr Asn Val Val  
1 5

<210> 27  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 27  
Gln Lys Gly Asn Met Val  
1 5

<210> 28  
<211> 6  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 28  
Gln Lys Gly Asn His Val  
1 5

<210> 29  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 29  
Gln Lys Gly Asn Met Val  
1 5

<210> 30  
<211> 6  
<212> PRT  
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<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 30  
Gln Arg Gly Asn Lys Val  
1 5

<210> 31  
<211> 6  
<212> PRT  
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recognition sequence

<400> 31  
Gln Arg Gly Asn Lys Thr  
1 5

<210> 32  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 32  
Gln Leu Gly Asn Met Val  
1 5

<210> 33  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 33  
Gln Lys Gly Asn Lys Val  
1 5

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<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 34  
Gln Leu Gly Asn Lys Val  
1 5

<210> 35  
<211> 6  
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sequence

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Asn Ser Gly Ala Xaa Asn  
1 5

<210> 36  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 36  
Asn Ser Gly Ala Tyr Asn  
1 5

<210> 37  
<211> 6  
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<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 37  
Asn Ser Gly Ala Trp Asn  
1 5

<210> 38  
<211> 6  
<212> PRT  
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<220>     
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 38  
Asn Ser Gly Ala Phe Asn  
1                  5

<210> 39  
<211> 6  
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<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 39  
Asn Ser Gly Thr His Asn  
1                  5

<210> 40  
<211> 6  
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recognition sequence

<400> 40  
Asn Thr Gly Ala Tyr Asn  
1                  5

<210> 41  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 41  
Gly Ser Gly Ala Tyr Asn  
1                  5

<210> 42  
<211> 6  
<212> PRT  
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<220>     
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 42  
Gln Arg Gly Asn Lys Lys  
1                          5

<210> 43  
<211> 6  
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<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 43  
Gln Arg Gly Asn Val Lys  
1                          5

<210> 44  
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<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 44  
Gln Lys His Asn Lys Lys  
1                          5

<210> 45  
<211> 6  
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<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 45  
Gln Lys Gly Asn Tyr Lys  
1                          5

<210> 46  
<211> 6  
<212> PRT  
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<220> :  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 46  
Gln Lys His Asn Lys Lys  
1 5

<210> 47  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 47  
Gln Lys Gly Asn Ser Arg  
1 5

<210> 48  
<211> 6  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 48  
Gln Ser Gly Asn Lys Lys  
1 5

<210> 49  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 49  
Gln Lys Ser Asn Leu Arg  
1 5

<210> 50  
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<220>   
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 50  
Gln Lys Ala Asn Thr Lys  
1 5

<210> 51  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 51  
Gln Lys Ala Asn Lys Leu  
1 5

<210> 52  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 52  
Gln Leu Ser Asn Lys Lys  
1 5

<210> 53  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 53  
Gln Pro Gly Asn Lys Lys  
1 5

<210> 54  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220> **2**  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 54  
Gln Lys Gly Asn Asn Val  
1 5

<210> 55  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 55  
Gln Lys Ser Asn Asn Val  
1 5

<210> 56  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 56  
Gln Lys His Asn Leu Arg  
1 5

<210> 57  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 57  
His Lys His His Lys Ala  
1 5

<210> 58  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>   
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 58  
His Leu His His Lys Ala  
1 5

<210> 59  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 59  
Gln Arg Trp Leu Asn Arg  
1 5

<210> 60  
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<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 60  
Gln Arg Trp Leu Arg Arg  
1 5

<210> 61  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 61  
Gln Asp Trp Leu Asn Arg  
1 5

<210> 62  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>     
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 62  
Tyr Lys Arg Asp Asn Arg  
1                  5

<210> 63  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 63  
Trp Arg Ser Ser Leu Val  
1                  5

<210> 64  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 64  
Trp Gln Ser Ser Lys Val  
1                  5

<210> 65  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 65  
Trp Tyr Ser Ser Ile Val  
1                  5

<210> 66  
<211> 6  
<212> PRT  
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<220>     
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 66  
Phe Asp Ser Ser Arg Ala  
1                  5

<210> 67  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 67  
Ala Arg Trp Leu Asn Arg  
1                  5

<210> 68  
<211> 6  
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<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 68  
Glu Arg Trp Arg Asn Arg  
1                  5

<210> 69  
<211> 6  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 69  
Glu Arg Trp Arg Arg Arg  
1                  5

<210> 70  
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<212> PRT  
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<220>       :  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 70  
Glu Lys Trp Arg Arg Arg  
1                   5

<210> 71  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 71  
Glu Gly Trp Arg Arg Arg  
1                   5

<210> 72  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 72  
Glu Arg Trp Arg Lys Arg  
1                   5

<210> 73  
<211> 6  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 73  
Glu Arg Trp Arg Asn Arg  
1                   5

<210> 74  
<211> 6  
<212> PRT  
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<220> **2**  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 74  
Glu Arg Trp Arg Ile Arg  
1 5

<210> 75  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 75  
Glu Arg Trp Arg Ser Arg  
1 5

<210> 76  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 76  
Glu Arg Trp Arg Val Arg  
1 5

<210> 77  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 77  
Glu Arg Trp Arg Leu Arg  
1 5

<210> 78  
<211> 6  
<212> PRT  
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<220> **2**  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 78  
Glu Lys Trp Arg Thr Arg  
1 5

<210> 79  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 79  
Glu Asn Trp Arg Lys Arg  
1 5

<210> 80  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 80  
Glu Gln Trp Arg Lys Arg  
1 5

<210> 81  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 81  
Glu Arg Trp Arg Met Arg  
1 5

<210> 82  
<211> 6  
<212> PRT  
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<220>   
<223> Description of Artificial Sequence: Consensus sequence

<220>  
<221> MOD\_RES  
<222> (2)  
<223> Variable amino acid

<220>  
<221> MOD\_RES  
<222> (5)  
<223> Variable amino acid

<400> 82  
Thr Xaa Thr Asn Xaa Ser  
1 5

<210> 83  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger recognition sequence

<400> 83  
Arg Arg Trp Leu Lys Leu  
1 5

<210> 84  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger recognition sequence

<400> 84  
Arg Lys Trp Leu Lys Leu  
1 5

<210> 85  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger recognition sequence

<400> 85 **z**  
Arg Lys Trp Leu Gln Leu  
1 5

<210> 86  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 86  
Arg Lys Trp Leu Arg Leu  
1 5

<210> 87  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 87  
Arg Lys Trp Leu Met Leu  
1 5

<210> 88  
<211> 6  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 88  
Arg Lys Trp Ile Asn Leu  
1 5

<210> 89  
<211> 6  
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<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 89    =  
Arg Lys Trp Tyr Gln Leu  
1                            5

<210> 90  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 90  
Arg Ala Trp Leu Lys Leu  
1                            5

<210> 91  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Zinc finger  
recognition sequence

<400> 91  
Lys Lys Trp Tyr Arg Leu  
1                            5